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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/468,537	12/20/1999	RONALD H MILLER	199-0516	3755

33198 7590 02/19/2004

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EXAMINER

JONES, HUGH M

ART UNIT	PAPER NUMBER
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2128

DATE MAILED: 02/19/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION**Requirement for Information - 37 C.F.R. §1.105****Introduction**

1. Applicants were asked to supply various documents deemed necessary for the examination of this application - see papers # 6, 10 (Requirement for Information). Applicants have supplied some of the documents and are thanked for their submission. However, Applicants have been either non-persuasive or silent in response as it relates to other documents. Therefore, Applicants are required to supply the following:

- Documents as subsequently listed;
- Clarification as to the apparent inconsistency between admittance in the specification regarding POWERFLOW and their statements on the record that Applicants do not possess such documents. Furthermore, the POWERFLOW disclosure is essential matter as evidenced by the specification. Applicants are reminded that there is an outstanding 112(1) rejection as it relates to reliance on POWERFLOW, among other issues. Finally, Applicants have made various allegations regarding the knowledge of skilled artisans at the time of filing as it relates to POWERFLOW – while arguing at the same time that they do not possess any POWERFLOW documents. Respectfully, such allegations are not persuasive.

2. In response to paper # 10, Applicants have supplied papers that were published after Applicant's filing date (as noted by Applicants). Applicants have relied upon the POWERFLOW™ teachings (line 32, page 6 to line 14, page 7, specification); however, no documentation has been provided. These teachings constitute essential matter. Applicants state

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(paper # 10) that they do not have such disclosures and further that they do not have any user's manuals.

3. The Examiner is not persuaded by Applicant's arguments and requires these documents from Applicants for the following reasons (the reasons are also provided because Applicants previously questioned why the Examiner thinks Applicants have the documents).

a) the fact is that the FLUENT document was in the application at the time of filing. The document is directed to computational fluid design applications including automotive external aerodynamics, engine block design and simulation, and engine manifold design and simulation. The FLUENT teachings are considered very relevant to examination of the application.

b) PowerFlow News (1998) states that PowerFlow was used at Ford Motor Company, including applications directed at internal flow in engines.

c) Item "u" (form 892, paper # 6) refers readers to the Strumolo et al. paper to find details of "Exa" and PowerFLOW.

d) The Miller reference (paper # 7 - IDS), which is co-authored by Strumolo and Miller expressly discloses computational engine flow analysis using PowerFLOW.

e) Applicants rely upon PowerFLOW in the *specification* (line 32, page 6 to line 14, page 7) for *essential matter*.

4. In response to Applicant's arguments, please note the following requirement for information.

5. **Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application (see earlier arguments):**

1) Applicants have relied upon the *POWERFLOW*TM teachings in the specification (line 32, page 6 to line 14, page 7, specification); however, no documentation has been provided. These teachings constitute essential matter. Applicants are required to provide any *PowerFLOW* information such as manuals, which are dated prior to Applicant's filing date. *PowerFlow News* (1998) states that *PowerFlow* was used at *Ford Motor Company*, including applications directed at internal flow in engines. Item "u" (form 892, paper # 6) refers readers to the Strumolo et al. paper to find details of "Exa" and *PowerFLOW*. The Miller reference (paper # 7 - IDS), which is co-authored by Strumolo and Miller expressly discloses computational engine flow analysis using *PowerFLOW*.

2) *Applicants are also required to explain why the specification discloses that the preferred embodiment requires PowerFlow; that Applicants are referred to on the EXA website (PowerFlow); that Applicants have published papers prior to the filing date disclosing teachings pertaining to PowerFlow- yet Applicants state that they do not have any documentation.* Applicants are reminded that Strumolo et al. have published a paper entitled "New directions in computational aerodynamics". The paper is listed at the *POWERFLOW*TM website (<http://www.exacom/newsite/newsevents/inthenews.htm>). *Strumolo* is both a co-author of the paper and a co-inventor (one of the Applicants). *PowerFlow News* (1998) states that *PowerFlow* was used at *Ford Motor Company*, including applications directed at internal flow in engines.

3) Applicants have submitted a document from the *Fluent*TM website. Applicants are required to supply any *Fluent*TM disclosures, which are dated prior to Applicant's filing date. Applicants allege that they don't know anything about *FLUENT*. The fact is that the *FLUENT* document was in the application at the time of filing. The requirement is based on the fact that the document was in the application at the time of filing and because the document is directed to computational fluid design applications including automotive external aerodynamics, engine block design and simulation, and engine manifold design and simulation. The *FLUENT* teachings are considered very relevant to examination of the application.

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6. The information is required to enter in the record the art referred to in the application or specification, or as indicated by the applicant as relevant to this examination (see earlier arguments):

- Applicants have relied upon the *POWERFLOW*TM teachings in the specification (line 32, page 6 to line 14, page 7, specification); however, no documentation has been provided. These teachings constitute essential matter. Applicants are required to provide any *PowerFLOW* information such as manuals, which are dated prior to Applicant's filing date. *PowerFlow News* (1998) states that *PowerFlow* was used at *Ford Motor Company*, including applications directed at internal flow in engines. Item "u" (form 892, paper # 6) refers readers to the Strumolo et al. paper to find details of "Exa" and *PowerFLOW*. The Miller reference (paper # 7 - IDS), which is co-authored by Strumolo and Miller expressly discloses computational engine flow analysis using *PowerFLOW*. In response to 112(1) rejections, Applicants have made various allegations regarding the knowledge of skilled artisans at the time of filing as it relates to *POWERFLOW* – while arguing at the same time that they do not possess any *POWERFLOW* documents. Respectfully, such allegations are not persuasive.

- Applicants have submitted a document from the FluentTM website. Applicants are required to supply any FluentTM disclosures, which are dated prior to Applicant's filing date. Applicants allege that they don't know anything about *FLUENT*. The fact is that the *FLUENT* document was in the application at the time of filing. The requirement is based on the fact that the document was in the application at the time of filing and because the document is directed to computational fluid design applications including automotive external aerodynamics, engine block design and simulation, and engine manifold design and simulation. The *FLUENT* teachings are considered very relevant to examination of the application.

7. For the reasons provided, the documents and Applicant's clarification are considered especially relevant to the instant application and are required by the Examiner for consideration. The text

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accompanying the documents obtained to date and specification provides sufficient description which indicates that the listed references, are considered very relevant and appears to be *essential* to the instant invention and claims, and therefore the applicant is required to provide the office with copies of the indicated references for consideration. The Examiner requires the documents because the Examiner needs to consider them in so far as they *are material to the patentability of the application as per 37 C.F.R. 1.56*.

8. **The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement.** This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

9. **The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56.** Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item. Applicants are reminded that they have referred to the material in the specification and have relied upon the material in a declaration in order to attempt to traverse 112(1) rejections.

10. **This requirement is subject to the provisions of 37 CFR 1.134, 1.135 and 1.136 and has a shortened statutory period of 2 months. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

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11. Any inquiry concerning this communication or earlier communications from the examiner should be:

directed to:

Dr. Hugh Jones telephone number (703) 305-0023, Monday-Thursday 0830 to 0700

ET, *or* the examiner's supervisor, Kevin Teska, telephone number (703) 305-9704.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry) *or*

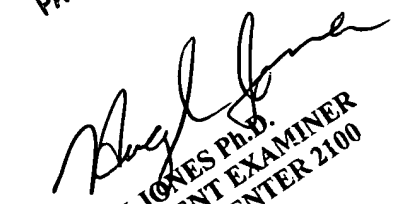
(703) 308-1396 (for informal or draft communications, please label "*PROPOSED*" or "*DRAFT*").

Dr. Hugh Jones

Primary Patent Examiner

February 18, 2004


KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER


HUGH JONES Ph.D.
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